

Consensus Report on the Detailed Fetal Anatomic Ultrasound Examination

Indications, Components, and Qualifications

76811 Task Force

This consensus report was developed by the 76811 Task Force, under the leadership of the American Institute of Ultrasound in Medicine (AIUM) and the Society for Maternal-Fetal Medicine (SMFM). The document was developed with the assistance of and reviewed by the American College of Obstetricians and Gynecologists (ACOG) and has been reviewed and endorsed by the AIUM, SMFM, American College of Obstetricians and Gynecologists (ACOG), American College of Radiology (ACR), Society of Diagnostic Medical Sonography (SDMS), and Society of Radiologists in Ultrasound (SRU).

Address correspondence to Joseph Wax, MD, MMC Ob/Gyn Associates, 887 Congress St, Suite 200, Portland, ME 04102 USA.

E-mail: waxj@mmc.org

Abbreviations

ACOG, American College of Obstetricians and Gynecologists; ACOOG, American College of Osteopathic Obstetricians and Gynecologists; ACR, American College of Radiology; AIUM, American Institute of Ultrasound in Medicine; CPT, Current Procedural Terminology; SDMS, Society of Diagnostic Medical Sonography; SMFM, Society for Maternal-Fetal Medicine; SRU, Society of Radiologists in Ultrasound

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Initially developed for detailed ultrasound studies performed for pregnancies with increased risk of fetal anomalies, there has been little consistency in the application of *Current Procedural Terminology (CPT)* code 76811 (“ultrasound, pregnant uterus, real time with image documentation, maternal evaluation plus detailed fetal anatomic examination, transabdominal, single or first gestation”) since it was first included in the 2003 edition of *CPT*.^{1,2}

On April 9, 2013, the American Institute of Ultrasound in Medicine (AIUM) and the Society for Maternal-Fetal Medicine (SMFM) hosted a meeting in New York, New York, to develop the appropriate indications for performing a detailed fetal anatomic ultrasound examination, the components of the examination, and the training required to interpret it. Participants included representatives from the AIUM, SMFM, American College of Obstetricians and Gynecologists (ACOG), American College of Osteopathic Obstetricians and Gynecologists (ACOOG), American College of Radiology (ACR), Society of Diagnostic Medical Sonography (SDMS), and Society of Radiologists in Ultrasound (SRU).

Indications

The detailed fetal anatomic examination (CPT 76811) is not intended to be the routine ultrasound examination performed for all pregnancies. Rather, it is an indication-driven examination performed for a known or suspected fetal anatomic abnormality, known fetal growth disorder, genetic abnormality, or increased risk for a fetal anatomic or genetic abnormality. Thus, the performance of the detailed fetal anatomic examination should be rare outside referral practices with special expertise in the identification and diagnosis of fetal anomalies. Only 1 such medically indicated study per pregnancy per practice is appropriate. If 1 or more required structures are not adequately demonstrated during the 76811 examination, the patient may be brought back for a focused assessment (76816). A second detailed fetal anatomic survey should not be performed unless there are extenuating circumstances.

Indications for a detailed fetal anatomic examination include but are not limited to the following conditions:

1. Previous fetus or child with a congenital, genetic, or chromosomal abnormality³;
2. Known or suspected fetal anomaly or known growth disorder in the current pregnancy³;

3. Fetus at increased risk for a congenital anomaly, such as the following:
 - a. Maternal pregestational diabetes or gestational diabetes diagnosed before 24 weeks' gestation⁴;
 - b. Pregnancy conceived via assisted reproductive technology⁵;
 - c. High maternal body mass index (≥ 35 kg/m²)^{6,7};
 - d. Multiple gestation⁸;
 - e. Abnormal maternal serum analytes, including α -fetoprotein level and unconjugated estriol⁹;
 - f. Teratogen exposure¹⁰;
 - g. First-trimester nuchal translucency measurement of 3.0 mm or greater¹¹;
4. Fetus at increased risk for a genetic or chromosomal abnormality, such as the following:
 - a. Parental carrier of a chromosomal or genetic abnormality³;
 - b. Maternal age of 35 or older years at delivery³;
 - c. Positive screening test results for aneuploidy, including noninvasive prenatal testing³;
 - d. Soft aneuploidy marker noted on an ultrasound examination¹²;
 - e. First-trimester nuchal translucency of 3.0 mm or greater¹¹;
5. Other conditions affecting the fetus, including the following:
 - a. Congenital infections¹³;
 - b. Maternal drug dependence¹³;
 - c. Isoimmunization¹⁴;
 - d. Oligohydramnios¹⁵; and
 - e. Polyhydramnios.¹⁵

Table 1 includes examples of *International Classification of Diseases, Ninth Revision*, codes associated with various indications for the 76811 examination.

Specifications of the Examination

A detailed comprehensive fetal ultrasound examination (76811) includes, in addition to all of the components of a basic fetal ultrasound examination (76805), a detailed anatomic survey, fetal and maternal, as outlined in Table 2. Some components depend on the gestational age at the time the examination is performed. Components in Table 2 marked with a superscript footnote (^a) are performed when medically indicated.

Qualifications to Perform and/or Interpret the Detailed Fetal Anatomic Ultrasound Examination

Performance and interpretation of a detailed fetal anatomic scan (76811) require advanced skills and knowledge and the ability to effectively communicate the findings to the patient and her referring physician. For quality assurance, the physician should obtain outcomes of anomalous cases when possible and maintain records showing the correlation between the outcomes and the sonographic findings. Detailed anatomic scans of the fetus are optimally performed in facilities that are accredited in ultrasound by organizations such as the ACR and AIUM.

Training

Physicians performing and/or interpreting detailed fetal anatomic ultrasound examinations must meet at least 1 of the following qualifying criteria:

1. The physicians are appropriately trained obstetricians, maternal-fetal medicine specialists, or radiologists with special expertise in fetal imaging who have acquired the appropriate knowledge and skills mentioned above. The training required to acquire those skills may include subspecialty fellowships such as maternal-fetal medicine, or fellowships of at least 1 year that include obstetric ultrasound training under the formal supervision of a qualified physician.^a
2. In lieu of subspecialty training, physicians can keep a log showing that they participated in the scanning and interpretation of at least 100 detailed fetal anatomic scans performed in pregnancies in which there is increased risk of a fetal anatomic or genetic abnormality, under the formal supervision of a qualified physician.^a The physicians should also be involved in the interpretation of at least 25 fetal cases with major morphologic abnormalities. This log should include a signed attestation by the supervising physician.

^a The supervising interpreting physician must meet 1 of the 2 qualifying criteria mentioned. The supervising physician reviews, discusses, and confirms the diagnosis of the physician being supervised. The supervising interpreting physician does not have to be present at the time of the initial interpretation. However, the supervising physician must review and, if necessary, correct the final interpretation.

Maintenance of Competence

All physicians performing detailed fetal anatomic ultrasound examinations should maintain continuing competence in the interpretation and reporting of these examinations. Once qualifying criteria have been met, ongoing experience is the best method for avoiding the erosion of skills. The performance of an average of 1 or 2 detailed fetal anatomic surveys per week (100 per annum) should allow a physician to maintain competence.

Continuing Medical Education

The physician should complete 10 hours of *AMA PRA Category 1 Credits™* in obstetric ultrasound examinations of fetal anomalies and/or other components of the detailed fetal anatomic ultrasound examination every 3 years.

Table 1. Examples of *International Classification of Diseases, Ninth Revision*, Codes Associated With Various Indications for the 76811 Examination

Code	Indication
278.01	Morbid obesity (severe obesity with a body mass index of ≥ 35 kg/m ²)
647.43	Malaria complicating pregnancy, antepartum condition or complication
647.63	Other viral diseases complicating pregnancy, antepartum condition or complication
647.83	Other specified infectious and parasitic diseases complicating pregnancy, antepartum condition or complication
648.03	Diabetes mellitus complicating pregnancy, antepartum condition or complication
648.33	Drug dependence complicating pregnancy, antepartum condition or complication
648.53	Congenital cardiovascular disorders complicating pregnancy, antepartum condition or complication
651.03	Twin pregnancy, antepartum condition or complication
651.13	Triplet pregnancy, antepartum condition or complication
651.23	Quadruplet pregnancy, antepartum condition or complication
651.33	Twin pregnancy with fetal loss and retention of 1 fetus, antepartum condition or complication
651.43	Triplet pregnancy with fetal loss and retention of 1 or more fetus(es), antepartum condition or complication
651.53	Quadruplet pregnancy with fetal loss and retention of 1 or more fetus(es), antepartum condition or complication
653.63	Hydrocephalic fetus causing disproportion complicating pregnancy, antepartum condition or complication
653.73	Other fetal abnormality causing disproportion complicating pregnancy, antepartum condition or complication
655.03	Central nervous system malformation in fetus complicating pregnancy, antepartum condition or complication
655.13	Chromosomal abnormality in fetus complicating pregnancy, antepartum condition or complication
655.23	Hereditary disease in family possibly affecting fetus complicating pregnancy, antepartum condition or complication
655.33	Suspected damage to fetus from viral disease in mother complicating pregnancy, antepartum condition or complication
655.43	Suspected damage to fetus from other disease in mother complicating pregnancy, antepartum condition or complication
655.53	Suspected damage to fetus from drugs complicating pregnancy, antepartum condition or complication
655.63	Suspected damage to fetus from radiation complicating pregnancy, antepartum condition or complication
655.83	Other known or suspected fetal abnormality, not elsewhere classified, complicating pregnancy, antepartum condition or complication
655.93	Unspecified known or suspected fetal abnormality affecting management of mother, antepartum condition or complication
656.13	Rhesus isoimmunization complicating pregnancy, antepartum condition or complication
656.23	Isoimmunization from other and unspecified blood group incompatibility, antepartum condition or complication
656.53	Poor fetal growth complicating pregnancy, antepartum condition or complication
657.03	Polyhydramnios complicating pregnancy antepartum condition or complication
658.03	Oligohydramnios complicating pregnancy, antepartum condition or complication
659.53	Elderly primigravida complicating pregnancy, antepartum condition or complication
659.63	Elderly multigravida complicating pregnancy, antepartum condition or complication
659.73	Abnormality in fetal heart rate or rhythm, antepartum condition or complication
663.83	Other umbilical cord complications, antepartum condition or complication
665.93	Unspecified obstetric trauma, antepartum condition or complication
793.6	Nonspecific abnormal findings on radiologic and other examinations of abdominal area, including retroperitoneum
793.99	Other nonspecific abnormal findings on radiologic and other examinations of body structure
V23.81	Supervision of high-risk pregnancy of elderly primigravida
V23.82	Supervision of high-risk pregnancy of elderly multigravida
V23.85	Pregnancy resulting from assisted reproductive technology
V28.2	Other antenatal screening based on amniocentesis
V85.35–V85.45	Body mass index ≥ 35 –70 kg/m ² and over, adult

These examples are provided to assist clinicians and are not intended to be all-inclusive.

Table 2. Components of CPT 76811 (Basic and Detailed Examinations)

Component	Basic	Detailed
Head and neck	Lateral cerebral ventricles Choroid plexus Midline falx Cavum septi pellucidi Cerebellum Cisterna magna	3rd ventricle ^{a,16} 4th ventricle ^{a,16} Lateral ventricles ^{b,16} Cerebellar lobes, vermis, and cisterna magna ^{b,17} Corpus callosum ^{a,18} Integrity and shape of cranial vault ¹⁹ Brain parenchyma ²⁰ Neck ^{21,22} Profile ^{23–25}
Face	Upper lip	Coronal face (nose/lips/lens ^a) ²³ Palate, ^a maxilla, mandible, and tongue ^{a,26,27} Ear position and size ^a Orbits ^a
Chest Heart and thorax	Cardiac activity 4-chamber view Left ventricular outflow tract Right ventricular outflow tract	Aortic arch Superior and inferior venae cavae ^{28,29} 3-vessel view ²⁹ 3-vessel and trachea view ³⁰ Lungs ^{31,32} Integrity of diaphragm ³³ Ribs ^{a,34,35}
Abdomen	Stomach (presence, size, and situs) Kidneys Urinary bladder Cord insertion site into fetal abdomen Umbilical cord vessel number	Small and large bowel ^{a,36–38} Adrenal glands ^{a,39} Gallbladder ^{a,40,41} Liver ^{38,42} Renal arteries ^{a,43} Spleen ^{a,42} Integrity of abdominal wall ^{b,44}
Spine	Cervical Thoracic Lumbar Sacral spine	Integrity of spine and overlying soft tissue ^{b,45,46} Shape and curvature ^{45,46}
Extremities	Legs Arms	Number: architecture and position ^{47–51} Hands ^{51–53} Feet ^{51–54} Digits: number and position ^{a,51,52} Sex ^{a,55}
Genitalia	In multiple gestations When medically indicated	
Placenta	Location Relationship to internal os Appearance Placental cord insertion (when possible)	Masses ^{56,57} Placental cord insertion ⁵⁸ Accessory/succenturiate lobe with location of connecting vascular supply to primary placenta ^{a,59,60}
Standard evaluation	Fetal number Presentation Qualitative or semiquantitative estimate of amniotic fluid	
Maternal anatomy	Cervix (transvaginal when indicated) Uterus Adnexa	
Biometry	Biparietal diameter Head circumference Femur length Abdominal circumference Fetal weight estimate	Cerebellum ^{a,61} Inner and outer orbital diameters ^{a,62} Nuchal thickness (16–20 wk) ^{63–65} Nasal bone measurement (15–22 wk) ^{63–66} Humerus ^{a,63–65} Ulna/radius ^a Tibia/fibula ^a

^aPerformed when medically indicated.^bAlso included in the basic obstetric examination.

Conclusions

The goal of any diagnostic medical procedure is to improve patient care. Adherence to these recommendations may promote the performance of appropriately detailed ultrasound examinations when medically indicated, improve diagnostic accuracy when interpreted by a qualified physician, and reduce excess charges and patient copayments for more expensive examinations when a complete basic examination is sufficient.

76811 Task Force Members

AIUM

Joseph Wax, MD, Cochair

ACOG

Howard Minkoff, MD

ACOGG

Anthony Johnson, DO

ACR

Beverly Coleman, MD

Deborah Levine, MD

SMFM

Andrew Helfgott, MD, Cochair

Daniel O'Keefe, MD

SDMS

Charlotte Henningsen, MS, RT, RDMS, RVT

SRU

Carol Benson, MD

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